

IN THE CLAIMS:

Claims 2-5, 8, 10 and 16-20 were previously cancelled. Claims 11-15 are cancelled herein. Claims 1, 9, and 21 have been amended herein. New claims 28 and 29 are presented herein. All of the pending claims 1, 6, 7, 9, and 21-30 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of the Claims:

1. (Withdrawn – Currently Amended) A process for modulating virulence of a *Streptococcus* comprising:

modifying a genomic fragment of the *Streptococcus*;

wherein at least part of the genomic fragment is capable of hybridizing to the isolated or recombinant nucleic acid molecule of claim ~~14~~ 21; and

generating a clone having the modified genomic fragment.

2–5. (Canceled).

6. (Withdrawn) The process according to claim 1, wherein modifying the genomic fragment comprises functionally deleting the at least part of the genomic fragment capable of hybridizing to the nucleotide sequence.

7. (Withdrawn) A clone of a *Streptococcus*, obtained by the process according to claim 1.

8. (Canceled).

9. (Withdrawn – Currently Amended) A process for assaying virulence of a *Streptococcus* comprising:

assaying an ability of the *Streptococcus* to infect a subject;

wherein the *Streptococcus* comprises a genomic fragment associated with a virulence factor to infect a subject; and

wherein at least part of the genomic fragment is capable of hybridizing to the isolated or recombinant nucleic acid molecule of claim 11 ~~11~~ 21.

10-20. (Canceled).

21. (Currently Amended) An isolated or recombinant nucleic acid molecule comprising:

a nucleotide sequence of *Streptococcus suis* origin

wherein the nucleotide sequence comprises a contiguous sequence which hybridizes to the full length of nucleotides 89-263 of the nucleotide sequence of SEQ ID NO:37 at 65°C in a buffer having 0.5 M sodium phosphate, 1 mM EDTA, and 7% sodium dodecyl sulphate at a pH of ~~7.2~~ 7.2,

wherein the nucleic acid molecule remains hybridized after

washing twice with a buffer containing 40 mM sodium phosphate (pH 7.2), 1 mM EDTA and 5% sodium dodecyl sulphate for 30 minutes at 65°C and;

washing twice with a buffer containing 40 mM sodium phosphate (pH 7.2), 1 mM EDTA and 1% sodium dodecyl sulphate for 30 minutes at 65°C, and

wherein the complement of the nucleotide sequence encodes for a fibronectin-/fibrinogen-binding protein of *Streptococcus suis*.

22. (Previously Presented) A vector comprising the isolated or recombinant nucleic acid molecule of claim 21.

23. (Previously Presented) A host cell comprising the isolated or recombinant nucleic acid molecule of claim 21.

24. (Previously Presented) The host cell of claim 23, wherein the host cell is of a *Streptococcus* origin.

25. (Previously Presented) A composition comprising the isolated or recombinant nucleic acid molecule of claim 21.

26. (Previously Presented) The complement of the isolated or recombinant nucleic acid molecule of claim 11.

27. (Previously Presented) The complement of the isolated or recombinant nucleic acid molecule of claim 21.

28. (New) An isolated or recombinant nucleic acid molecule comprising:
a nucleotide sequence for a fibronectin-/fibrinogen-binding protein of *Streptococcus suis*,
wherein the nucleotide sequence comprises the nucleotide sequence of SEQ ID NO:37.

29. (New) An isolated or recombinant double stranded nucleic acid molecule comprising:

a gene encoding for a fibronectin-/fibrinogen-binding protein; and

a means for hybridizing to the nucleotide sequence of SEQ ID NO:37 at 65°C in a buffer having 0.5 M sodium phosphate, 1 mM EDTA, and 7% sodium dodecyl sulphate at a pH of 7.2,

wherein the means remains hybridized after

washing twice with a buffer containing 40 mM sodium phosphate (pH 7.2), 1 mM EDTA and 5% sodium dodecyl sulphate for 30 minutes at 65°C; and

washing twice with a buffer containing 40 mM sodium phosphate (pH 7.2), 1 mM EDTA and 1% sodium dodecyl sulphate for 30 minutes at 65°C.